USAID | LIBERIA
FROM THE AMERICAN PEOPLE

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R)

CONTRACT NO: EDH-I-00-08-00023

YEAR 3, QUARTER 1 PROGRESS REPORT (TO DECEMBER 2015)

20 January 2016

ENGINEERING SERVICES FOR RURAL ROAD REHABILITATION (ES3R)

CONTRACT NO. EDH-I-00-08-00023

YEAR 3, QUARTER 1

PROGRESS REPORT (To December 2015)

Prepared for: USAID/Liberia

Prepared by: Francisco Perez
Frederick Were-Higenyi

20 January 2016

Acronyms

A & E	Architect and Engineer
BOQ	Bills of Quantity
COP	Chief of Party
CO	Contracting Officer
COR	Contracting Officer Representative
ES3R	Engineering Services for Rural Roads Rehabilitation
ETL	Engineering Team Leader
EVD	Ebola Virus Disease
FED	Food and Enterprise Development
FTF	Feed the Future
FTL	Field Team Leader
F2M	Farm to Market
F2MRR	Farm to Market Road Rehabilitation
GIS	Geographic Information System
GOL	Government of Liberia
IWP	Interim Work Plan
LESSP	Liberia Energy Sector Support Project
LMWP	Liberia Municipal Water Project
LOE	Level of Effort
MCA	Multiple Criteria Analysis
MOF	Ministry of Finance
MPEA	Ministry of Planning and Economic Affairs
MPW	Ministry of Public Works
OCA	Organizational Capacity Assessment
PIRS	Performance Indicator Results Sheet
RE	Resident Engineer
SI	Site Inspector
USAID	United States Agency for International Development

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R)

YEAR 3, QUARTER 1, OCTOBER TO DECEMBER 2015

LIST OF CONTENTS

1. SUMMARY PROJECT DESCRIPTION

1.1 Introduction

The U. S. Agency for International Development's (USAID) 'Engineering Services for Rural Roads Rehabilitation (ES3R)' was awarded to Camp Dresser McKee International (CDM) under the following USAID contract number: EDH-I-00-08-00023 and task order AID-669-TO-13-00002 which records the period of performance as 8 October 2013 to 20 October 2015. The project was later amended by modification to extend the performance period to 8 April 2016.

Liberia's Farm to Market Rural Roads (F2MRR) activity is allied to the objectives of the Feed the Future (FTF) initiative, which is a U.S. government initiative aiming to address the root causes of global hunger by sustainably increasing agricultural productivity. F2MRR will provide infrastructure investment in the rehabilitation of rural farm-to-market roads to support the following:

- USAID /Liberia FTF program Food and Enterprise Development (FED),
- Capacity development for routine maintenance systems within the Government of Liberia (GOL),
- Capacity development of Ministry of Public Works (MPW) rural roads engineers and local A & E firms,
- Development of alternative low volume road pavement pilot projects, standards and design specifications.

1.2 Objectives

Within F2MRR, ES3R is the implementing mechanism, which is undertaking the following objectives:

Objective 1:
Provide construction oversight for three (3) local contracts for the rehabilitation of a total of 83.5 kilometers farm-to-market roads in Bong, Lofa, and Nimba counties from 2013 to 2015.

Objective 2:
Produce engineering designs and construction documents for the 450 kilometers farm-to-market roads in Bong, Lofa, Nimba, and Grand Bassa counties to be rehabilitated in 2015 to 2018.

Objective 3:

Training and pre-qualification of five (5) local architect-engineer firms capable of providing oversight for road rehabilitation activities by 2015.

2. QUARTERLY OVERVIEW

This is the first quarterly progress report to be presented for Year 3 of the project, covering the period of October through December 2015. This report details the work plan for the execution of remaining project activities for the three components through completion of the project. Per Modification No. 4 to the contract, USAID amended the contract with accompanying financial implications including a change in original scope of work in connection with the addition of 75 kilometers of construction oversight (through fourth calendar quarter 2015) and inclusion of a structural design team for 14 bridges with spans greater than 10 meters.

Component 3 for capacity development of the five pre-qualified firms was completed with a workshop to the principals of the five engineering firms on 2 September 2015, and the completion of the on-the job-training for five junior engineers exposed to the construction sites and design field activities.

2.1 Quarter 1 Year 3 Highlights Summary

The table below summarizes key events undertaken (by month) in the operations of the project. Items of importance are detailed in the following table.

Date	Description	Comment
	October	
Oct 5, 12, 19 26, 2015	Submittal of weekly updates	To USAID Liberia
October 6, 2015	Meeting with MPW Dep Minister for determination of sharing office operation cost of ES3R in MPW premises	MPW
October 12, 2015	Joint (Road, Box Culverts and Bridge) Design review at Mamba Point Hotel	Including USAID Liberia, MPW and ES3R

October 15, 2015	Submittal of Quarterly Report for Quarter 4, Project Year 2	USAID COR
October 16, 2015	Meeting with Swedish International Development Agency for coordination of Feeder Road supervision procedures	MPW & ES3R team
October 16, 2015	Report for Technical Review Committee 10% Design Stage	CDM Smith TRC Members
October 29, 2015	Contract Mod 1 -extend services of local Environmental Specialist and Administration Assistant	To Five A&E firms

Date	Description	Comment
	November	
November 2, 9, 16, 23, 30 2015	Submittal of weekly updates	To USAID Liberia
November 6, 2015	Technical Review Committee (TRC) for 10 % stage	CDM HO, ES3R COP & ETL
November 12, 2015	Design delivery of 41.7km for three road links at Grand Bassa, Lofa and Nimba Counties	To USAID/Liberia
November 13, 2015	Submittal of Monthly Progress Report for the month of October	To USAID Liberia
November 17, 2015	Weekly review meeting with USAID COR at MPW premises	USAID COR, ES3R COP

DATE	Description	Comment
	December	
December, 1, 2015	Submittal Design documents for two road links at Grand Bassa for a total length of 39.3km	To USAID Liberia
December 4, 2015	Submittal of budget realignment to complete works by 8 April 2016	To USAID Liberia

December, 7 & 14 2015	Submittal of Weekly Project Update	To USAID Liberia
December 16, 2015	Submittal of 71.9 km of road and bridge design	To USAID Liberia
December 16, 2015	Submittal of Annual report for Year 2	To USAID Liberia
December 18, 2015	Contracting Officer issues approval of Budget Realignment to cover CDM activities up to end of March 2016	To CDM Smith

2.2 Quarter 1 Year 3 Details of Highlights

2.2.1 EVD Crisis in Liberia

The Ebola crisis is largely over, but we continue to monitor along the areas bordering with neighboring countries

2.2.2 Progress Meetings with USAID

Periodic meetings were held between the ES3R team and with the USAID Contracting Officer Representative (COR) at the project office in Monrovia as well as in the field sites.

2.2.3 Project Deliverables and Documentation

In the Table below, Documents and Letters are identified in chronological order with those communications of particular relevance to the progression of Works on the ES3R project during this reporting period.

Table of ES3R Communication Documents and Letters

Communication		Date	Detail
From	To		
USAID	CDM	October 4, 2015	USAID would be issuing a Closeout letter issues with procedures to follow
USAID	CDM	October 5, 2015	Suggesting organization of meeting with MPW Deputy Minister to discusse the office space issue for running the project
CDM	USAID	October 6, 2015	Recommendation on the MOU period for provision of office space for the current project and FRAMP
USAID	CDM	October 9, 2015	Advising that data entry for indicators should be done in the up coming two weeks as the system would close by month end
USAID	CDM	October 9, 2015	Issue travel request approval for Eugene Becker to conduct a project audit
USAID	CDM	October 9, 2015	Briefing USAID on first day of activities of workshop on Roads to Business Development
USAID	CDM	October 15, 2015	Suggestion from USAID to introduce at same time with the Indicator values, the GIS
USAID	CDM	October 15, 2015	Notification of no-objection from USAID to hire the remaining Inspector Engineer for Bong County
USAID	CDM	Nov 13, 2015	Notification from USAID COR of next weekly meeting scheduled on Nov 17 at 14:00 hours
USAID	CDM	Nov 18, 2015	USAID asks for revision to travel approval request for international travel of Mr. Becker

			and Mr. Dotson instead of a request for country clearance.
USAID	CDM	Nov 18, 2015	ES3R to submit a demobilization and assets disposal plan for USAID's review and approval. This plan shall outline the project's plan for demobilization, assets disposal and project closeout for the period December 2015 to March 2016.
USAID	CDM	Nov 19, 2015	Notification from USAID COR that it would postpone the approvals of actions individuallyfor the rest of the project life, until ES3R shows demobilization plan and project closeout
USAID	CDM	Nov 19, 2015	USAID COR suggests to realign the remaining activities with completed project deliverables, documenting lessons learned, final report writing and supporting the project transition should be a key focus of the use of the remaining project resources.
USAID	CDM	Nov 24, 2015	USAID issues approval for Mr. Eugene Becker to travel to Liberia as requested for a period November 16 to 27, 2015 to facilitate financial closure of the books in advance of project closure.
USAID	CDM	Nov 24, 2015	USAID issues approval for Mr. Eugene Becker to travel to Liberia as requested for a period November 16 to 27, 2015 to facilitate financial

			closure of the books in advance of project closure.
USAID	CDM	Nov 27, 2015	USAID voiced concern on that the retention of all FTLs beyond 2015 would require approval of a contract modification, however, we have demonstrated that no modification would be required if it is proposed as a budget line item realignment within the current budget.
USAID	CDM	Dec 1, 2015	USAID requests the ES3R to organize November field monthly meeting in first week of December
USAID	CDM	Dec 3, 2015	Westwood has indicated that a box culvert appears to be over-designed. USAID COR requested we investigate further into the basis of Westwood's assertions.
USAID	CDM	Dec 8, 2015	USAID COR mentions that he had reviewed SSF report and found in the progress photographs section of the appendix that the contractor had constructed concrete haunch blocks instead of a continuous haunch as is designed. COR requests ES3R to follow up so that the specific culverts in this section are corrected, and if concrete works for the subject haunches are included in the current invoice, they are to be removed until such time that the contractor can demonstrate that this was corrected.
USAID	CDM	Dec 8, 2015	USAID observes that from the photographs, the steel arrangement,

			diameter and quality of the form works on the head walls shown are also of concern. COR suggested that the SSF Project Manager provide more specific locations for each of the of the photographs in the report
USAID	CDM	Dec 10, 2015	USAID COR advises that Demobilization Plan needs to be modified to present readjustment of activities between March and April 2016
USAID	CDM	Dec 10, 2015	USAID comments that all project activities and expenditures must to be closed by the end of March and that there might be some close out actions in HO later.
USAID	CDM	Dec 15, 2015	USAID indicated that CO would approve the budget realignment through a letter to CDM
USAID	CDM	Dec 18, 2015	COR forwards to ES3R COP approval letter by USAID CO of Budget Realignment

2.2.4 Field Visits to Counties Sites

USAID Contracting Officer Representative (COR) and ES3R Team visited the construction sites in Nimba and Bong counties in November 2015 for site inspection and progress meetings. In December 2015 the ES3R visited Tailorta road in Bong County to access the site conditions for the box culvert claimed by the contractor to have been overdesigned and a report will be presented in January 2016.

The ES3R project will continue to provide construction oversight on on-going contracts during the period under review.

2.2.5 Design of Roads and Bridges

The design of roadways, box culverts and bridges along the prioritised and surveyed road links in the four counties continued during this quarter. Design of approximately 187 km, 35 box culverts and 14 bridges were completed as shown in Table 2.3.

Table 2.3: Summary of Designs

County	Road links surveyed (km)	Road links designed (km)	Box culverts designed (no.)	Bridges designed (no.)
Bong	58.3	-	-	2
Grand Bassa	139.5	83.9	8	6
Lofa	96.7	56.7	6	1
Nimba	92.7	46.5	21	5
Total	**387.2**	**187.1**	**35**	**14**

Note: all bridges have been designed and 8 no. box culverts remain to be designed.

Designs for road links totaling 187.1 km were submitted to USAID by the end of the quarter under review. In addition to the earlier designed 75 km the total design of road links submitted to USAID is 262 km out of the original 450 km. The previously submitted 75 km of road design are now under construction in Phase–II allotted to the original contracts in Bong, Nimba and Lofa.

2.2.6 Revised Work Plan

A revised work plan was presented to the USAID COR and other officers involved in ES3R project on 26 February 2015, and later

resubmitted on 27 March after incorporation of comments by USAID (received on 17 March 2015). The work plan included a narrative statement with a revised approach and strategy to complete the remaining activities and components. This work plan considered the impact of the EVD crisis, the additional 75-km of construction oversight, introduction of a structural team (for bridge design), as well as incorporation of additional capacity building and training within the Ministry of Public Works, and their logistical support with rented vehicles. During the reporting period execution of this work plan continued.

ES3R plans to have draft designs for all road links, box culverts and bridge structures completed by end of March 2016.

3.0 PROJECT OBJECTIVES PROGRESS

3.1 Objective 1 – Construction Oversight

All the three contractors received received contract modifications in April / May 2015. Work activities continued in all the three counties during the quarter under review. Table 3.1 gives a summary of the contract data and progress for each of the three contracts.

Table 3.1: Summary of Works Contracts

Description	Westwood Corp: BONG	SSF: LOFA	21st Century: NIMBA
Original scope			
Contract Award Date	22 Jan 2014	27 Jan 2014	22 Jan 2014
Contract period	16 months	16 months	16 months
Maintenance and defects liability period	8 months	8 months	8 months
Extension of time due to EVD	-	3 months	-
Planned completion period	22 May 2015	27 Aug 2015	22 May 2015
Actual completion	Aug 2015	Jun 2015	Sept 2015
Modification			
Contract award date	7 April 2015	26 May 2015	7 April 2015
Contract period	12 months	12 months	12 months
Maintenance and defects liability period	8 months	8 months	8 months
Planned completion period	6 April 2016	25 May 2016	6 July 2016
Overall physical progress	39%	15%	15%
Financial Progress			
Contract Value, Original scope	$1,895,141.86	$592,384	$843,228.25
Contract Value Additional scope	$1,861,722.41	$973,851.35	$2,183,507
Total	$3,756,864.27	1,566,235.35	$3,026,286
Value of works certified as of Dec 2015 - Original	$1,837,030	$578,706	$824,080
Value of works certified as of Dec 2015 - Modification	$732,688	$146,810	$333,820

3.1.1 Bong County

Construction of three roads totaling 49.6 km under the original scope (Phase I) was substantially completed in August 2015 and placed under routine maintenance. Rehabilitation of two roads totaling 31.6 km under the modification scope was on-going over the reporting period.

Phase I road links

i) Tolomai - Leleh – Palala	29.9 Km
ii) Gbenequelleh – Janyea	10.5 Km
iii) Gbenequelleh - Duita to Molly Town	9.2 Km
Total	**49.6 Km**

Phase II road links

i) Taylorta - Marlonta to Yandewoin	14.1 Km
ii) Gbondoi – Gbarnla	17.5 Km
Total	**31.6 Km**

Construction oversight supervision continued to be provided by the Site Inspector on a daily basis while the Field Team Leader conducted weekly visits. The cumulative physical progress as on end of December 2015 is 39%.

3.1.2 Lofa County

Construction of three roads totaling 13.6 km under the original scope (Phase I) was substantially completed in June 2015 and placed under routine maintenance. The scope under the modification covers one road of 15 km and construction activities were on-going but at a slow progress compared to constractor work schedules.

The Phase I road links and contract data is shown below.

i) Barkedu-Jamulor-Moibadu	8.3 km
ii) Bitijama	3.6 km
iii) Galamai	1.7 km
Total	**13.6 km**

Phase II road links.

John's Town-Bulor	15.0 km
Total	**15.0 Km**

The ES3R continued to provide the construction oversite supervision. The cumulative physical progress stood at 15%, a slower progress than anticipated. The executed works included: site clearance 100%, heavy grading 22%, gravelling 0% and installation of culverts 30%.

3.1.3 Nimba County

The original scope of 21.5 km was substantially completed in September 2015 and placed under routine maintenance. Construction works are on-going on the additional scope (Phase II) which covers two roads totaling 27.9 km.

The Phase I road links.

i) Bahn-Payee-Zuoplay	14.9 Km
ii) Dwonwea-Zoe Lappa	4.1 Km
iii) Duanpea	2.5 Km
Total	**21.5 Km**

Phase II road links.

i) Gogein-Zuaplay junction – Doumpa-Zuaplay	22.1 Km
ii) Gaopa-Garwompa	5.8 Km
Total	**27.9 Km**

The ES3R continued to provide the construction oversite supervision. The physical progress stood at 15%, a slower progress than anticipated. The executed works included: site clearance 74%, heavy grading 4%, gravelling 10%, reshaping 50% and installation of culverts 30%.

3.2 Objective 2 – Design and Contract Documents

3.2.1 Road Field Surveys

The survey of roadways, box culverts and bridges was completed and field data translated for all road links totaling to 387.2 km in the four counties. This is in addition to the already completed and submitted 75 km package, for a combined total of 462.2 km instead the envisaged 450km in contractual Component No. 2. The analysis of new data and designs continued during the period under review. A summary of the road links, box culverts and bridges surveyed is shown in Table 3.2.

Table 3.2: Summary of Field Surveys

County	Road links surveyed (km)	Box culverts surveyed (no.)	Bridges surveyed (no.)
Bong	58.3	-	2
Grand Bassa	139.5	10	6
Lofa	96.7	8	1
Nimba	92.7	27	5
Total	**387.2**	**45**	**14**

3.2.2 Road Designs and Documentation

A total of 187.1 km of road links including 37 box culverts and 14 bridges were designed and submitted to USAID by the end of the period under review. The list of road links designed is shown in Table 3.3.

Table 3.3: Summary of Designs

Road Link	Total Length (km)	Designed Length (km)	Designed Box Culvert (No.)	Designed Bridge (No.)
Bong County				
Foequelleh-Morgan	2.2			
Foequelleh-Menequah-Yowee	13.0			1
Felela-Jarwuta	9.1			1
Wensue-Kpai	9.0			
Sinyea-Kayata	14.0			
Bassa Town-Veleyan-Molonakpaiga	11.0			
Sub total	***58.3***	**-**	**-**	***2***
Nimba County				
Garwompa-Nyonkiayee	22.5	22.5	7	
Kpai-CNC Junction (Zao)	10.0		-	
Boyee Junction-Goekorpa	12.5			
Graie-Toweh Town-Yourpea 2	47.7	24.0	14	4
Sub total	***92.7***	***46.5***	***21***	***4***
Lofa County				
Bulor-Tusu	10.4	10.4	4	
Koiba City-Koilahun-Bolahun	10.0		1	1
Checkpoint-Bassamolahun-Ngorkohun	7.0		1	
FoyaTown-Yasadu	8.0			
Foya Town-Sangai-Kelima Pombor	15.0			
Bulor – Goyala	1.8	1.8		
Zelemai-Womai	23.0	23.0		

Zorzor-Yeala Boarder	7.0	7.0		
Zorzor-Kpaiyea-Gbarnway	14.5	14.5		
Sub total	***96.7***	***56.7***	***6***	***1***
Grand Basa County				
Ben Luogan-Kor	2.5	2.5	1	
Blewein-Doewein-Sarwain	9.6	9.6		
Compound 1-Little Bassa-Vermah	21.8		1	1
Compound 1-Doezoh	0.9	0.9		
Compound 2-Zahn	18.8	18.8	5	
Garpu-Behn	6.3			
James Hennry-Kardor	12.0			
Karsuah-Newcess Beach	10.2			
Siah-Weiker	3.2			
Tain-Frank	2.1			
Waka-Johnny Tutu	7.3	7.3		
Waka-Compound 2	20.8	20.8	1	4
Yonbehn-Grand Kola	24.0	24.0		1
Sub total	***139.5***	***83.9***	***8***	***6***
Total	**387.2**	**187.1**	**37**	**13**

Note: An additional 1 bridge was designed for the on-going contract in Nimba County

3.3 Objective 3 – Training and Capacity Building

A & E firm Trainees

AE trainees were deployed to the construction sites in the Counties to participate for the planned on-the job training and were exposed to various disciplines in construction oversight such as bridges, culverts, earthworks, revetment works and random checking of spots quality. In addition, they participated in field surveys to include topographic, hydrological and geotechnical in preparation for road and culverts design. The participation of the five engineers from the five Engineering Firms included intensive teaching-learning conducted by

the ES3R Field Teams. The trainees completed a period of 3-4 months of training, starting in May 2015 through the end of August 2015.

Continuous assessments of the mentor program were undertaken during the training period to monitor progress. All trainees demonstrated a very positive attitude and interest towards the program.

The selected trainees rotated field assignments to ensure maximum exposure to field work activities. All trainees made a presentation on their training during the last workshop to their respective A&E firm management (September 2015). During the same workshop, the final ES3R Capacity Building workshop on Business Development was held from 25 August to September 4.

MPW Feeder Roads Engineers

Four MPW Feeder Road Engineers were temporarily assigned to the ES3R project to support the construction oversight and design packages. This approach is similar to the AE mentor program to promote skills transfer to local Liberian engineers. The four engineers under training assisted in design works for roads, and culverts as well as providing assistance to construction oversight. The training came to an end on 30 November 2015. Thereafter the engineers made a presentation to the Ministry of Public Works on what they learned during the four months exposure to the ES3R programme.

Resident Engineers (REs)

It is now considered that the REs in Bong, Nimba and Lofa are sufficiently acquainted with the survey process to manage day to day survey verification, roadway designs and construction oversight.

We consider this advancement of RE capabilities, gained through work on the project, to be a significant accomplishment. This knowledge transfer is in line with the capacity building objectives established at the beginning of the project.

Site Inspectors (SIs)

With the promotion of Bong RE to FTL, the site inspector of works has been elevated to the post of RE as envisaged in Inception Report. Mentoring of the promoted RE has been intensive and successful taking into consideration that he has been on the same team from inception. A new Site Inspector was recruited to replace the promoted RE.

3.4 Performance Management Plan - PIRS

The Performance Indicator Reference Sheets (PIRS) related to the progress of the ES3R project are included in Annex B of this document.

4. PROJECT CHALLENGES

The following items have been encountered during the course of the project and pose challenges to the ES3R team and project:

Challenge / Issue	Mitigation / Resolution
All contractors are struggling with the design / build contract model, thus require much support in preparation of submittals.	ES3R has to offer additional time of support to contractors in order that compliance be achieved and progress achieved.
The lack of capability of local contractors required that excessive time spent by FTL's in guidance and mentoring process.	ES3R must strike a practical balance between formal mentoring of contractors and progression of survey and design works required.
MPW Specification contained in Feeder Roads Manual is inconsistent with USAID/Liberia conditions of contract.	A modified Specification is now consistent with conditions of contract, To be used prior to next solicitations.

5. WORK PLAN FOR NEXT QUARTER

Field teams are in place in the three working counties for construction oversight and design with overall coordination of the Engineering Team Leader and Chief of Party. Work anticipated in the January – March 2016 time frame is as follows:

Objective 1: Construction Oversight

All field teams will continue to provide construction oversight and mentoring of contractors during the defects Liability Period of the substantially completed 84-km package and on-going rehabilitation of the 75 km under the modification scope of work.

Objective 2: Design and Contract Documents

The ES3R team will continue with data analysis and design of road links and box culverts and documenation of the designs during the next quarter. Two teams will continue to design the Lofa/Nimba and Bong/Grand Bassa road links while the box culvert team and bridge team will continue to design the drainage structures and preparation of tender documents. The box culvert design team will assist with the roadway designs upon completion of box culvert designs. It is anticipated that most of the draft designs, strip maps, drawings and tender documents will be in place by end of the upcoming quarter.

Objective 3 – Training and Capacity Building

This component has been completed in Quarter 4 Year 2 of the project.

See reference in Section 3.3.

Performance Management Plan - PIRS

The Performance Indicator Reference Sheets (PIRS) related to the progress of the ES3R project are included in Annex B of this document.

6. FINANCIAL REPORT

Financial Expenditures for the project to end of the quarter are shown in the below table:

Row Labels	Sum of RAW COST		TOTAL Cost
01-Auto - A/P	96401.43		96401.43
01-Mileage - expense	16.81		16.81
02-Entertainment - A/P	598.05		598.05
03-Room - A/P	145264.99		145264.99
03-Room - expense	8688.3		8688.30
04-Park, Toll, Taxi - A/P	45796.63		45796.63
04-Park, Toll, Taxi - expense	141.36		141.36
05-Prints - A/P	1123.7		1123.70
05-Prints - expense	87		87.00
06-Supplies - A/P	199887.84		199887.84
06-Supplies - expense	110		110.00
07-Miscellaneous - A/P	158164.85		158164.85
07-Miscellaneous - expense	1000.06		1000.06
08-Telephone - A/P	10629		10629.00
08-Telephone - expense	58		58.00
09-Car Rental - A/P	1875		1875.00
09-Car Rental - expense	350		350.00
10-Air Fare - A/P	14858.95		14858.95
10-Air Fare - expense	25493.81		25493.81
11-Outside Professionals	2844569.15		2844569.15
12-Computer - A/P	35847.2		35847.20
19-Shipping, Postage - A/P	1284.49		1284.49
24-Field Equipment - A/P	50750.7		50750.70
26-Auto - expense	170		170.00
28-Overnight Delivery - A/P	29.45		29.45
30-Meals - A/P	69070.21		69070.21
30-Meals - expense	4841.78		228790.96
45-Business Conference	75.3		75.30
Labor	121711.51	223949.18	345660.69
Labor Local	466360.69	858103.67	1324464.36
Overseas Differential - ODC	70847.36		70847.36
Overtime	60.92		60.92
Grand Total	4376164.54		5585765.14
		Fee @ 7.5%	418932.39
		Inception to Date	**6,004,697.52**

ANNEX A

ES3R NARRATIVE

And

YEAR 2 WORK PLAN

Year 2 Work Plan Narrative

This section of the work plan narrative is composed of 3 sub-sections.

1. Summary of activities undertaken since the submission of the Inception Report
2. Balance of works remaining as of February 2015
3. A strategy for the delivery of project outputs

Each sub-section is further divided into component 1 and component 2.

1. Summary of Activities March 14 – February 2015

This section summarizes activities from the commencement of field works in March 2014 until February 2015.

The illustration below indicates the geographic spread of the ES3R activities for the remainder of the project life.

An inherent characteristic of field-based activities has and will continue to be long journey times and challenging road conditions. Figure 1 illustrates the range of the Project sites.

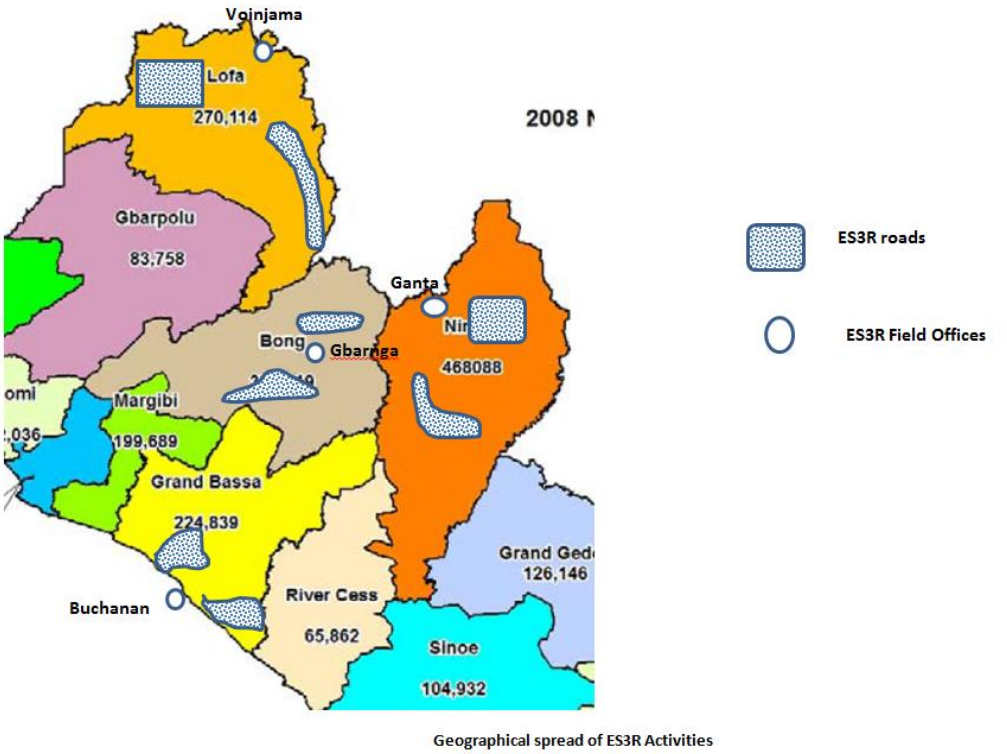


Figure 1. ES3R activities

The ES3R field team structure proposed in the Inception Report is composed of 3 teams. Each team is composed of three engineers, a Field Team Leader (TCN), a Senior Engineer (national), and a Site Inspector, (national).

Field Team Leaders and Senior Engineers were mobilized and orientated by end of March.

1.1 Component 1. Construction Oversight

Quality Assurance Contracting (March – July 2014)

The contracting mechanism by USAID for the initial road improvement contracts was a 'design and construct' model.

Contractor's contracts indicated that ES3R provide 'full time construction oversight' and 'on site mentoring' to assist Contractor's project management with its design submission and subsequent construction management.

The ES3R contract states 'periodic field missions'.

The extra level of effort expended on 'on site' mentoring impacted the identification of 450 km of 'road links for Component 2.

1.2. Component 2 – Road Design

This component can be divided in the 3 distinct activities

1. Identification of 450 km of road links selected for detailed design
2. Field surveys on each of the road links
3. Detailed design of road links based on data collected in the field surveys.

Selection of Roads - (April – June 2014)

ES3R devised a 'road link' selection tool based on a combination of cost effectiveness and socio- economic benefits. This replaced the Cost – Benefit Analysis suggested in the ES3R contract.

The outputs are indicated in table 1 below. The table is extracted from the Prioritization Report submitted as a part of the October ’14 Design Report.

County	Roads Under contract	Rapid assessment survey	Prioritization outputs	Detailed Design of prioritized road links	
	Jan '14 - Dec '15	April'14 – May '14	June '14	July'14 - Sept '14	Oct '14 - Sept '15
Bong	49	261.6	88.3	31.6	56.7
Nimba	21	302	117.4	27.7	89.2
Lofa	14	199.2	120.7	15.0	105.3
Grand Bassa	0	239.4	136.7	0	136.7
	84 km	1002.2 km	463.1 km	74.3 km	387.9 km

Table 1. Summary of Design outputs as envisaged July 2014

Field surveys of prioritized road links (June – July 2014)

Field surveys commenced as soon as the County prioritization workshop had been completed.

Road Design of 74 km (August – October 2014)

All teams were withdrawn from field activities (components 1 and 2) in early August as a consequence of EVD. Component 3 scheduled to commence in September 2014 was suspended.

A Design Report for 74.3 km was submitted on 25th October 2014.

Table 2 below illustrates the composition of the Design Report.

County	District	Road Link	Road Classification	Length km	Large R.C. drainage structures
Bong	Suokoko	Gbondoi – Gbarnla	Feeder	17.5	
	Yealequelleh	Taylorta Marionta – Nyan Yendewound	Secondary	14.1	3
	Total			**31.6**	
Nimba	Saclepea Mahn	Gaopa Garwompa	Secondary	5.575	
	Tapita	Dounpa - Zuaplay	Feeder	10.8	5
		Gogein - Zuaplay	Feeder	11.4	
	Total			**27.7**	
Lofa	Voinjama	John's Town Bulor	Feeder	15.0	1
	Total			15.0	
Grand total				**74.3**	**9**

Table 2. Breakdown of Design Report Submission Oct 2014

Remodeling MPW standard documentation (August – October 2014)

MPW has a set of Standard Documents, March 2012. These are composed of, standard drawings and technical specifications. These documents were to be used as the basis for all ES3R detailed designs.

However, it became apparent that the standard documents had never been utilized to previous projects so to measure its effective application. The documents possess significant inconsistencies and irregularities, such their usefulness limited.

To rectify this deficiency ES3R undertook:

a. Lobbying for MPW recognition of the limitations of current package of MPW standard documentation.
b. Reworking all standard design drawings and construction details
c. Reworking of Method of Measurement and Bill of Quantities
d. Reworking and expanding on MPW's Technical Specifications

The 74.3 km design submission has been designed, quantified and presented using the remodeled standard documents.

2.2 Road Design of the outstanding 387 km

Road Design in Clusters

The prioritization workshops held in each of the four Counties generated a total of 386 km of road links. The road links vary in length from 8.6km – 46.3km. To facilitate ease of packaging the road links into suitable and convenient contract sizes, links have been grouped into clusters in each County.

Lengths and geographical fragmentation of the Clusters varies.

The scope of work in the recommended range of cluster sizes permits large, medium and small road contractors with the opportunity to bid on tendered packages. Clusters can be combined or split as necessary.

Box Culvert Design (35 nr) in 393 km

During the rapid assessment, April May ’14, 35 multi-cell box culverts were provisionally identified as required within the 387 km.

Each of these structures must be individually tailored to suit the river/road crossing point. The exact size and configuration of the structures can only be determined after detailed topographic and hydraulic surveys.

Eight box culvert locations were surveyed and outputs assessed during the design of the 74.3 Km. Hydraulic assessments at these crossing points reveal the adjacent river systems to be complex with existing water crossing points determined by the construction of road embankments either side of the crossing point. Very few are natural courses. Analysis of river characteristics required, to ascertain the optimum size, configuration and location of the new structure therefore requires considerable expertise.

Large Bridge Design (14 nr) in 467 km

The rapid assessment identified 14 river crossing points that strongly indicate a bridge with a clear span exceeding 12m as an optimum crossing structure. Such structures lie beyond the current scope of works.

Detailed topographic and hydraulic assessment is needed before selecting a crossing structure.

It is assumed for the purposes of this report that 14 bridges are required.

2. Strategy for Delivering ES3R Project Outputs - March 15 – Feb 2016

ES3R is proposing the following strategic resource allocation as the most efficient and effective means of project output delivery.

The implementation of this plan will be undertaken in collaboration with MPW counterparts at the National and County level.

Suggested Project Team Structure Revision

ES3R is proposing 6 teams to undertake the balance of works between March 2015 and February 2016.

This structure permits maximum specialization through the division of labor. This structure also permits A & E trainees involvement with a team whose activities focus on a specific topic i.e. road design, culvert design and bridge design, and environmental mitigation as the trainees move from team to team.

The proposed structure therefore produces greater productivity and concurrently creates a more coherent and focused training/learning environment.

3.1. Component 1: Construction Oversight Team (March 2015– February 2016) 84 km + 74.3 km

The additional 75km designed during August – October has been prepared using the remodeled documentation.

During the period March to June the ES3R field teams will therefore be overseeing two 'road clusters' in their respective Counties, the original 84 km and the proposed 75 km. The additional works in all three Counties are remote from the original road links.

Motorcycles are not considered suitable form of transport due to the long distance between the clusters. Rented vehicles are proposed as site transport until such time as the original 84 km of road links are substantially complete. This is anticipated to be until the end of June 2015.

Contractors are expected to work a 6-day week until rains in July/August become debilitating and severely impede progress. Between March and June it is proposed to have a 6-day working week and the SIs paid accordingly.

It is expected that A & E firm trainees join the ES3R team during this active period. Field Team Leaders will be required to visit sites once a week to ensure contractual compliance and manage site progress meetings.

SIs will revert to a conventional 5-day working week, once contractors have reduced construction activities due to rains.

USAID anticipate that its FRAMP program will be active between October and December 2015. It is anticipated that component 1 will be handed over during this transitional period.

3.2. Component 2 Road Design

Teams 2 & 3: Lofa and Nimba 196 km, Bong and Grand Bassa (194 km) March 2015 – February 2016

March – July 2015 Field Surveys

It is proposed that a single team undertake road designs for Lofa and Nimba. Likewise with the Bong and Grand Bassa Team, two counties covered by one team. Productivity of the field surveys is linked to time available in dry season 2015. This is assumed to be March – July. Trainees will be assigned to both teams during this period.

USAID has requested that MPW second 4 Feeder Road Engineers to ES3R for the balance of the project life. The engineers will supplement the road design teams. It is envisaged that the MPW engineers be exposed to ES3R's feeder road design methodology during field surveying April – July.

The engineers will be allocated to each of the four ES3R teams: road and culvert survey x2, box culvert survey and the environmental/community team.

Efforts are now underway identify, interview and sensitize selected candidates.

With the benefit of a recent Component 3 workshop 12 – 14 March 2015, specifically focused on the role, relationships and responsibilities of mentors and mentees, ES3R is now more able to accurately predict and quantify time required for effective skill enhancement for the junior engineers from both MPW and private sector.

The project will have 9 such engineers as from April 2015.

To permit the anticipated LOE expended on skill transfer during the critical field survey period, April – July, ES3R proposes to mobilize a specialized survey firm.

The survey firm will focus on topographic surveys needed for Grand Bassa, to a lesser extent Bong and proposed bridge sites.

While every effort will be made to substantially complete field surveying before the onset of the rainy season (the mobilization of the survey firm is intended to do just this), this cannot be guaranteed. The onset of early rains, road and bridge conditions and other unforeseen circumstances will ultimately determine survey outputs.

However, it should be noted that while any delay will impact the design delivery schedule, it will not have any impact on the proposed F2MRR procurement program of road improvement contracts. It should be further

noted that surveys for road links that are unavoidably postponed until after rainy season will benefit by capturing deterioration of the road link caused by the rainy season.

Target outputs for field survey are 10 km/week/team.

August 2015 – March 2016 – Detailed Design

The teams move to Monrovia for the detailed design stage. Using Monrovia as the detailed design center offers MPW engineers the opportunity engage the design activities. A & E firm trainees will be exposed to the design process from data entry to contract packaging.

Target outputs for detailed design are set at 8 km/week/team.

The level of detail of the 387 km designs is not anticipated being equal to the level included in the 74.3 km presented in the Design Report, October 25, 2014, but still within he contractual frame.

However; any omitted detail in the conceived contractual design may be easily generated/supplemented by Contractors with the support of an adequately qualified supervision team.

In order to maintain the expected competence of the designs it is proposed that the teams continue to be managed by TCNs.

Team 4: Box Culvert Design Team -

Eight box culverts were designed for the 74. 3-km submission.

A further 35 similar structures are anticipated.

Engineering Field Survey Teams (teams 2, 3 & 4)

- ES3R's 6 teams offer 5 different feeder road related subjects,
- Topographic surveying,
- Tacheometric surveying
- Hydraulic surveying
- Hydraulic assessment
- Carriageway defect assessment
- Engineering materials sampling and classifying

Construction Oversight (team 1)

- Contract documentation
- Compliance testing and inspection
- Quality control techniques
- Site communications
- Construction Site reporting
- Monthly reporting
- Monthly measurement activities
- Stakeholder engagement at construction phase

Environmental Management and

Detailed Design (teams 2, 3, 4 and 6)

Community Engagement (team 6)

- Developing an environmental management plan
- Monitoring the plan
- Managing the plan
- Stakeholder engagement at the planning level
- Intervention selection
- Preparation of strip maps
- Quantification of interventions
- Preparation of detailed drawings
- Preparation of Bills of Quantities
- Unit Rate Analysis

It is anticipated that by the end of each trainee's exposure's time to both field and office based activities each will have a fundamental comprehension of all aspects of the feeder road design process and construction oversight.

Institutional Training

Capacity Building is considered here as one of the main types of Capacity Building efforts, along with human Capacity Building; both are closely inter-related and complement each other.

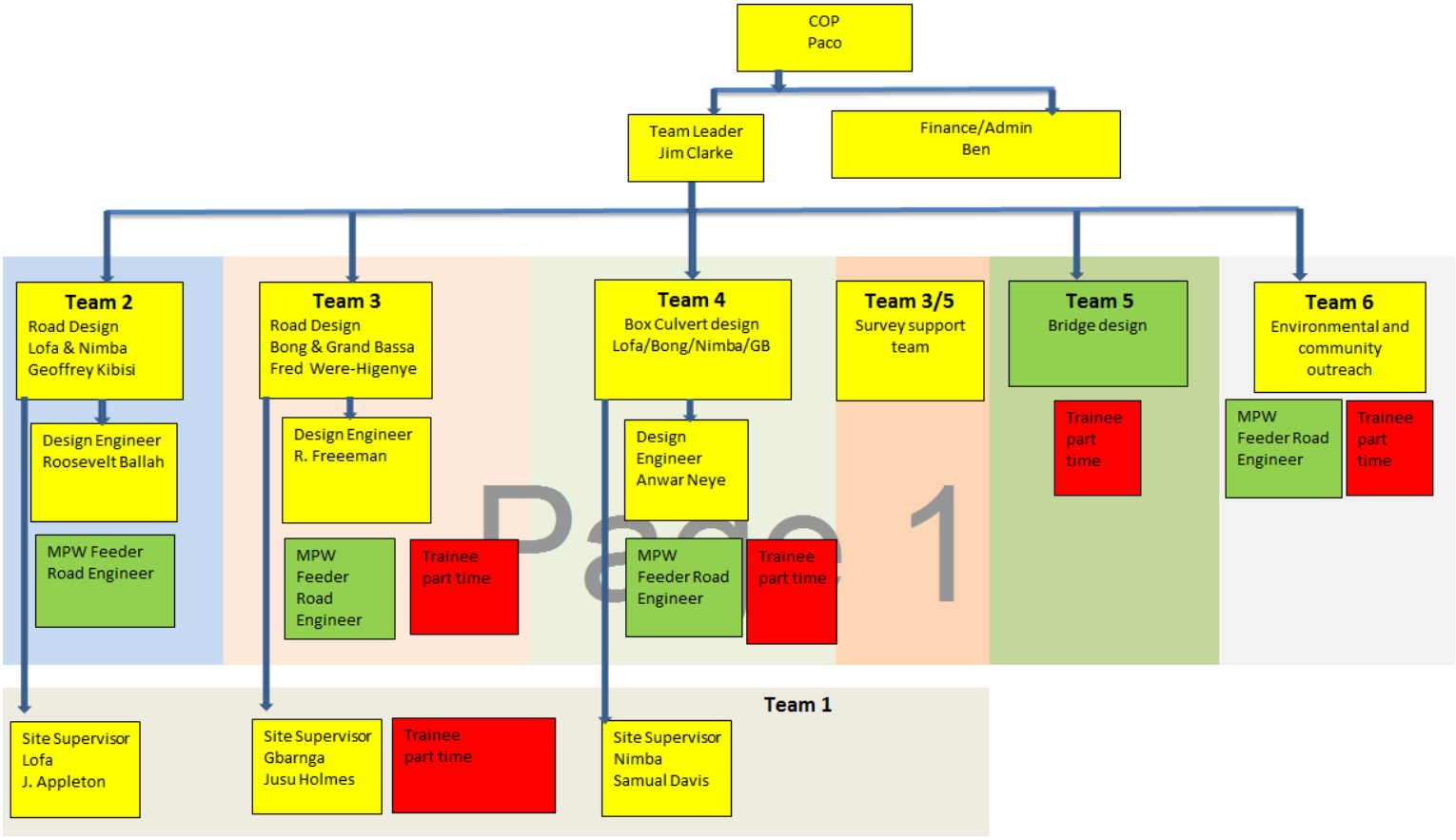
Institutional Capacity Building addresses the Capacity beyond the provision of education and training of professionals. It aims to enhance the capacity of governments, business, non-governmental groups and communities to plan and manage the coast efficiently and effectively.

There are several dimensions regarding institutional development according to the desired level, such as for executives of the E & A Firms.

TRG Workshops No. 1&2 were focused on field engineering strategies and on Institutional training held in the third week of March by TRG expert assisted by the ES3R team.

The attendees to these Workshops with a duration of 3&4 days respectively, were addressed to junior engineers belonging to the E&E firms; and the second workshop, to owners/managers to whom were shown the different tools for identification of technical and administrative staff that in the near future may be able to prepare technical and financial proposals, management of resources human and materials for design and construction supervision of engineering works, stressing on the communication area.

The trainees were also aided with the different management techniques to execute in a sound engineering way the management in consultancy contracts.



August 2015- March 2016 – Detailed Design

Detailed design will take place in Monrovia project Office.

Team 5: Bridges in Lofa, Nimba, Bong and Grand Bassa (March - December 2015)

ES3R propose to engage the services of an experienced bridge design team. The key persons in the team are: qualified Bridge Engineer and an experienced auto-CAD Technician.

The Bridge Design Team will undertake:

- Hydraulic assessment,
- Materials investigation
- Hydraulic design
- Foundation design
- Structural design of sub and super structure
- Preparation of Bills of Quantities and cost estimates for each structure

It is anticipated that 13 days are required for each structure, 5 days for field assessments and 8 for the design and quantification.

The field works are scheduled to complete by end of the current dry season, with the assumed 6-day working weeks.

Detailed design will take place in Monrovia. This arrangement offers similar advantages for A & E firm trainees to teams 2, 3 & 4.

Team 6: Environmental Issues and Community Engagement

The ES3R environmental specialist is programmed to visit the Project in April 2015. She will assist the Project in identifying a suitable candidate for a full time position as Environmental/Community outreach Officer who will be properly trained and instructed to continue the environmental mitigation measures as part of the project.

The environmental Specialist will prepare a scope of work for the proposed new position and introduce and orientate the person regarding the Programmatic Environmental Assessment Report and Environmental Monitoring and Mitigation Plans as it pertains to the Project.

The role of the Environmental/Community Consultation Officer is twofold:

- Environmental Impact mitigation
- Community Outreach

The officer will support the field survey assessments, ensuring that design interventions are environmentally friendly, that potentially impacted eco systems adjacent to the road links are recorded and EMMPs formulated accordingly.

The officer will ensure that roadside communities are sensitized regarding both road design surveys and future road improvement contracts.

The environmental/community outreach officer will engage with traditional and administrative leaders ensuring that all beneficiary stakeholders are informed of and agree to roles and responsibilities of all implementing agencies.

It is envisaged that trainees will be introduced to issues and mitigation measures as they relate to environmental impact and community engagement on road improvement activities.

3.3 Component 3, Capacity Building

The 5 A & E firms selected in February 2014 have been contacted. All five have expressed their interest in continuing with the program.

Technical Training

After completion of Workshops mentioned in previous section, outputs were orientation, training agreements and a 'on the job' training schedule...

ES3R field staff and A & E firm site engineers now have a competent understanding of the mentor/mentee relationship and the dedication required to realize meaningful and lasting skill development.

Each A & E firm is allocated approximately 8 months; 4 months in all in-field activities (survey, road and culverts' construction oversight, etc.) and, four of which months will be field based and the balance 4 months in the Monrovia design office.

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R)

ANNEX B

PERFORMANCE INDICATOR

REFERENCE SHEETS

Updated to the year 2015

PERFORMANCE INDICATOR REFERENCE SHEET FOR FIELD SURVEYS

YEAR	BONG	LOFA	NIMBA	GRAND BASSA	BONG	LOFA	NIMBA	GRAND BASSA	
2013	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**BASE YEAR**
2014	**150**				**31.6**	**15.4**	**28.2**	**0**	**75.2**
2015	**300**				**-**	**57.0**	**54.0**	**105.0**	**216.0**
2016	**0**				**51.0**	**44.0**	**39.0**	**43.0**	**177.0**

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated

Name of Intermediate Result: N/A

Name of Indicator: Length of Rehabilitated farm –to-market roads completed

Geographic Focus: Bong, Lofa and Nimba

Is this an Annual Report indicator? No ___ Yes X Yes___, for Reporting Year(s) ____2013/2016_____

DESCRIPTION

Precise Definition(s):

Unit of Measure: Kilometer

Method of Calculation: Measure of length of roads

Disaggregated by: None

Justification & Management Utility: Usefulness of Indicators

PLAN FOR DATA ACQUISITION BY USAID

Data collection method: Driving along the roads

Data Source: Project sites

Method of data acquisition by USAID: Reporting

Frequency and timing of data acquisition by USAID: Annual

Estimated cost of data acquisition: Included in project cost

Individual responsible at USAID: David Wounuah

Individual responsible for providing data to USAID: Francisco Perez

Location of Data Storage: PIDS

DATA QUALITY ISSUES

Date of Initial Data Quality Assessment: N/A

Known Data Limitations and Significance (if any): N/A

Actions Taken or Planned to Address Data Limitations: N/A

Date of Future Data Quality Assessments: N/A

Procedures for Future Data Quality Assessments: N/A

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

Data Analysis: Manual

Presentation of Data: Tabulated

Review of Data: Regular Check

Reporting of Data: Quarterly and Annual Report

OTHER NOTES

Notes on Baselines/Targets: Stipulated

Other Notes: None

PERFORMANCE INDICATOR VALUES

Year	Target	Actual	Notes
2013	0	0	
2014	83.5	0	Due to EVD, target not achieved
2015	160*	83.5	Substantial completion by July 2015 original 83.5
2016	160	By new project	

THIS SHEET LAST UPDATED ON: DECEMBER 2015

*ES3R will provide technical and oversight support to Dec 2015 as requested by USAID in modification 4.

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated			
Name of Intermediate Result: Construction oversight provided for Local Contracts			
Name of Indicator: Length of road that has construction contract for rehabilitation awarded and in place			
Geographic Focus: Bong, Lofa and Nimba			
Is this an Annual Report indicator? No ___ Yes X Yes___, for Reporting Year(s) ____2013/2016_____			
DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Kilometer			
Method of Calculation: Measure of length of roads			
Disaggregated by: None			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Driving along the roads			
Data Source: Project sites			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Francisco Perez			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0		

2014	83.5	83.5	
2015	160	160	Additional design packages have been awarded to current contractors.
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Construction oversight provided for local contracts
Name of Indicator: Length of roads inspected during construction
Geographic Focus: Bong, Lofa and Nimba
Is this an Annual Report indicator? No ___ Yes _ X Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Kilometer
Method of Calculation: Measure of length of roads
Disaggregated by: None
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID
Data collection method: Driving along the roads
Data Source: Project sites
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual
Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS
DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: N/A
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: N/A
Procedures for Future Data Quality Assessments: N/A
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING
Data Analysis: Manual
Presentation of Data: Tabulated
Review of Data: Regular Check
Reporting of Data: Quarterly and Annual Report
OTHER NOTES
Notes on Baselines/Targets: Stipulated
Other Notes: None

PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0		
2014	83.5	83.5	Due to EVD, target not achieved
2015	160	75	New Construction packages began June 2015
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Engineering contract documentation produced
Name of Indicator: Length of roads with complete engineering designs submitted to USAID/Liberia
Geographic Focus: Bong, Lofa , Nimba and Grand Bassa
Is this an Annual Report indicator? No ___ Yes _X Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Kilometer
Method of Calculation: Measure of length of roads
Disaggregated by: None
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID
Data collection method: Driving along the roads
Data Source: Project sites
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual
Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS
DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: N/A
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: N/A
Procedures for Future Data Quality Assessments: N/A
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING
Data Analysis: Manual
Presentation of Data: Tabulated
Review of Data: Regular Check
Reporting of Data: Quarterly and Annual Report
OTHER NOTES

Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0		
2014	75	75	Due to EVD, original target (150) was not achieved
2015	270	45	393 km of field survey by July 2015. Designs commenced in August 2015. Target not yet achieved due to extension in contract Mod. period
2016	163	65	Expected by Y3, Q2 end – March 2016
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Engineering contract documentation produced
Name of Indicator: Bid documents prepared and submitted to USAID/Liberia
Geographic Focus: Bong, Lofa ,Nimba and Grand Bassa
Is this an Annual Report indicator? No ___ Yes X _Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Kilometer
Method of Calculation: Measure of length of roads
Disaggregated by: None
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID
Data collection method: Driving along the roads
Data Source: Project sites
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual
Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS
DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: N/A

Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2014	75	75	Due to EVD, target not achieved. Target has been rebase lined with new work plan.
2015	270	0	Design commenced Aug 2015. Target not yet achieved due to extension in contract Mod. period
2016	393	231	
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Survey for design completed
Name of Indicator: Length of survey (windshield and instrument) conducted
Geographic Focus: Bong, Lofa , Nimba and Grand Bassa
Is this an Annual Report indicator? No ___ Yes _ X Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Kilometer
Method of Calculation: Measure of length of roads
Disaggregated by: None
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID
Data collection method: Driving along the roads
Data Source: Project sites
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual
Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS

DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0		
2014	75	75	Due to EVD, original target (150) not achieved.
2015	375	393	Survey ahead of revised work plan schedule.
2016	0	0	
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Target roads determined
Name of Indicator: Prioritized target roads for further design development based upon stakeholders needs and requirements
Geographic Focus: Bong, Lofa , Nimba and Grand Bassa
Is this an Annual Report indicator? No ___ Yes X_Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Kilometer
Method of Calculation: Measure of length of roads
Disaggregated by: None
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID
Data collection method: Driving along the roads
Data Source: Project sites
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual

Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS
DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: N/A
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: N/A
Procedures for Future Data Quality Assessments: N/A
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING
Data Analysis: Manual
Presentation of Data: Tabulated
Review of Data: Regular Check
Reporting of Data: Quarterly and Annual Report
OTHER NOTES
Notes on Baselines/Targets: Stipulated
Other Notes: None

PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0		
2014	150	450	Prioritization completed ahead of schedule
2015	270	NA	
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Selected local A&E firms trained
Name of Indicator: Number of engineers and technical staffers from local A&E firms trained
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia
Is this an Annual Report indicator? No ___ Yes X_Yes___, for Reporting Year(s) ____2013/2016_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Number
Method of Calculation: Training logs/Attendance registers
Disaggregated by: Sex
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID

Data collection method: Signing attendance
Data Source: Project trainer
Method of data acquisition by USAID: Reporting
Frequency and timing of data acquisition by USAID: Annual
Estimated cost of data acquisition: Included in project cost
Individual responsible at USAID: David Wounuah
Individual responsible for providing data to USAID: Francisco Perez
Location of Data Storage: PIDS
DATA QUALITY ISSUES
Date of Initial Data Quality Assessment: N/A
Known Data Limitations and Significance (if any): N/A
Actions Taken or Planned to Address Data Limitations: N/A
Date of Future Data Quality Assessments: N/A
Procedures for Future Data Quality Assessments: N/A
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING
Data Analysis: Manual
Presentation of Data: Tabulated
Review of Data: End of training period
Reporting of Data: Quarterly and Annual Report
OTHER NOTES
Notes on Baselines/Targets: Stipulated
Other Notes: None

PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0	0	
2014	10	10	(5 Firms/10 Trainees)
2015	15	15	1 Engineers per firm plus two senior staff per firm

THIS SHEET LAST UPDATED ON: DECEMBER 2015

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Selected local A&E firms trained
Name of Indicator: Number of locals A&E firms with improved capabilities in the design and supervision of rural roads
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia
Is this an Annual Report indicator? No ___ Yes X _Yes___, for Reporting Year(s) ____2013/2015_____
DESCRIPTION
Precise Definition(s):
Unit of Measure: Number

Method of Calculation: Registration/Training logs			
Disaggregated by: None			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: By Registration			
Data Source: Project trainer			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Francisco Perez			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: End of training period			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0	0	
2014	5	5	Continuous training
2015	5	5	Training completed
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Prequalification document submitted
Name of Indicator: Develop evaluation criteria and conduct full assessment of available engineering sources.
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia

Is this an Annual Report indicator? No ___ Yes X _Yes___, for Reporting Year(s) ____2013/2015_____			
DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Number			
Method of Calculation: Training logs/Attendance registers			
Disaggregated by: Sex			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Assessment			
Data Source: Project trainer			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Francisco Perez			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: End of training period			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0	0	
2014	8	9	Firms reviewed with developed criteria
2015	NA	NA	
THIS SHEET LAST UPDATED ON: DECEMBER 2015			

Performance Indicator Reference Sheet

Name of Development Objective: Ease of Access to Markets Facilitated

Name of Intermediate Result: Local A&E firms identified			
Name of Indicator: Expression of interest evaluation completed for number of A&E firms			
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia			
Is this an Annual Report indicator? No ___ Yes X_Yes___, for Reporting Year(s) ____2013/2015_____			
DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Number			
Method of Calculation: Training logs/Attendance registers			
Disaggregated by: Sex			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Evaluation			
Data Source: Project trainer			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Francisco Perez			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: End of training period			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
2013	0	0	
2014	8	9	Firms
2015	NA	NA	
THIS SHEET LAST UPDATED ON: DECEMBER 2015			